Vatsa Patel

Software Engineer | Masters in CS student

San Francisco Bay Area
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/VatsaPatel

Experience

Software Engineering Intern | 3D RoomSpace Los Angeles, CA • May 2020 - Aug 2020
- Developed core services for the rental platform to **automate leasing, manage listings, deploy contracts on blockchain.**
- Rearchitected and migrated independent services under a scalable Kubernetes environment.

Tech Stack: GCP Cloud run, Kubernetes Engine | Node, GraphQL | React Native, React, Gatsby | DynamoDB

Contractor Software Engineer San Francisco, CA • May 2020 - Present
- **UniversityEats**: Building service using Plaid to **automatically analyze spendings from all linked banks** and set goals.
- **PodSource, SF**: Helped move to a scalable serverless architecture **reducing monthly bills by 72%.**
- Built a tool to **automatically tag and push docker images to 8 different Container Registries** with multiple logins.

Software Engineer | A D Patel Institute of Technology

Learning Management Platform Part-Time • Aug 2017 - Sept 2018
- Designed & developed a platform that automates and solves existing paper-based problems of Class Scheduling, Information sharing, Evaluations, Asset Management in which **lead & mentored team of 5 engineers.**
- **Engineered highly-available backend services** that are deployed through an in-house private cloud cluster through OpenStack with auto-scaling.
- Designed UI/UX interface designs that **got featured on Dribbble.** bit.ly/2TMf0n0

Tech Stack: React, React Native, Electron | NodeJS, Golang | MemSQL, HBase, Aerospike.

ADIT Alumni Hub Part-Time • Aug 2016 - Mar 2018
- Designed & **Developed a social platform** from scratch to allow Alumni to reconnect with each other, discover other alumni in same region and profession, share jobs & events. **Attained 6,400 users within first 3 months.**

Tech Stack: NodeJS, PHP | React, JQuery | MySQL, Memcached

Smarq Technologies Dec 2015 - May 2016
- **Ideated a startup at Qualcomm incubator** which was selected in the top-10 startup ideas out of thousands of applicants.
- Smarq: tightly-knit ecosystem of smart sensors capable of automation sequences based on local location of user.

Software Developer | Purva Couture Aug 2015 - Dec 2015
- Single-handedly **developed a cloud based Business Operations system** that managed from Sales to Production to Deliveries **handling 700+ clients & revenue of $1M+.**

Projects

SlackHR Feb 2020 - May 2020
- Developed a Slack plugin application that helps combat abusive conduct at a workplace backed by a Multi-Label classifier using Neural Network. **Currently used at IBM research team's Slack.**

Reverse proxy to increase downlink bandwidth Aug 2019 - Sep 2019
- Developed a reverse proxy that substantially minimizes the effect of Bandwidth Delay Product on TCP Throughput by buffering the file on multiple connections.
- Preliminarily achieved 8x improvement in streaming on intercontinental bandwidth with BBR congestion control.

Federated Learning - Privacy Enhanced Collaborative Machine Learning Jan 2019 - Aug 2019
- Optimized Federated Averaging Algorithm optimized for Large-Scale LSTM-CNN when the input consists of large number of small-sized updates in Homomorphic Encryption.
- Submitted and got invited to present my research paper in IEEE conference.

Skills

Backend: NodeJS, PHP, Python, Java, C++   **Database:** SQL : MySQL, Postgres | NoSQL : MongoDB, Redis, DynamoDB

DevOps: AWS, GCP, Docker, Kubernetes, CI/CD.   **Frontend:** JavaScript:React, React-Native, Android, HTML/CSS

Education

San José State University Jan 2020 - Dec 2021 Expected
Candidate for Masters in Computer Science. **Current GPA: 3.85**
Dual Specialization: Cloud Computing and Network Programming

Gujarat Technological University Jul 2015 - Jul 2019
Bachelor of Engineering in Computer Science. **GPA: 3.97**